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# Black Cherry

(*Prunus serotina*)

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Black cherry is a handsome wood with a reddish color and silky luster. It is used principally in the manufacture of high-grade finish and furniture, and as a backing for electrotypes used in printing. The wood is strong and moderately hard, stays in place well after it has been seasoned, and has a fairly uniform texture.

Black cherry grows scattered sparsely through the forests in the southeastern part of Canada and in the eastern part of the United States. Under favorable conditions the tree grows rapidly and attains an age of 150 to 200 years. It sometimes reaches a height of 100 feet and diameter of 4 feet or over, but such growth is rare.

The reported production of black cherry lumber during the 10-year period 1931-40 was roughly one-half of that in the previous decade (1921-30) and roughly one-third of that in the period 1911-20. This decrease has probably been due not only to the increasing scarcity of the wood, but also to the preference of many people for cabinet woods with more figure than black cherry, such as mahogany and black walnut. In 1941 and 1942 there was a marked rise in the production of black cherry lumber because needs of World War II increased demand for practically all woods. Although black cherry trees are nowhere abundant, their distribution over a large area tends to insure a continuing supply of the wood.

The fruit, which is a round, black drupe similar to a domestic cherry and about one-fourth the size, was formerly used in considerable quantities in making beverages known as cherry bounce and wild cherry cordial.

**Nomenclature.**—Black cherry is frequently called simply cherry. Other names in use are wild black cherry, wild cherry, rum cherry, chokecherry, and cabinet cherry.

**Distribution and growth.**—Black cherry's natural-growth range is in southeastern Canada from Nova Scotia to southern Manitoba, and in the United States throughout Maine westward to eastern North Dakota and southward to central Florida and central Texas. It also occurs in the mountain ranges of western Texas (fig. 1).

The tree grows under a wide range of climatic and soil conditions but develops best in a mild climate on moist, well-drained, rich soils. Such conditions are found on the slopes of the Allegheny Mountains from Pennsylvania to Tennessee, where black cherry trees with a height of 90 feet and diameter of 3 feet were not uncommon in

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the virgin forests. In New England the tree generally reaches a height of 30 to 50 feet and diameter of 15 to 24 inches.

Black cherry is sparsely distributed throughout its entire range. It grows singly or occasionally in small groups. Reproduction is by seed and sprouts. The small cherries, about the size of a pea, are a favorite food of birds who give the seeds a wide distribution. The tree develops an extensive root system, especially in dry soils. It can endure moderate shade. Under favorable conditions black cherry increases in diameter about 6 inches in 20 years. It has comparatively few enemies. Of these, a tent caterpillar which devours the foliage, especially on trees grown in the open, and a fungus which causes swellings on the branches, are probably the most destructive.

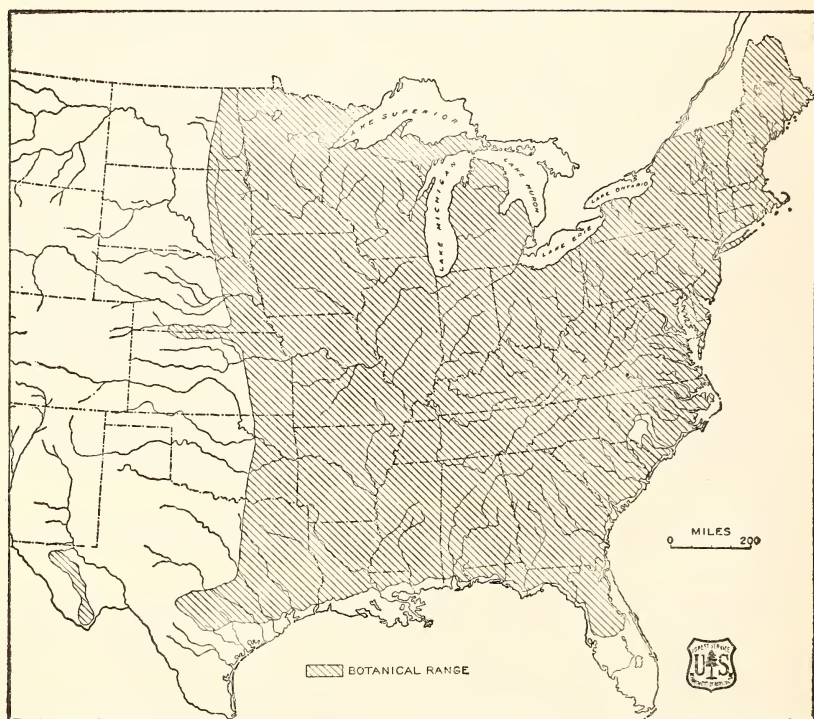


FIGURE 1.—Range of black cherry (*Prunus serotina*)

**Supply.**—Black cherry is found thinly scattered over some 30 States. Estimates of the supply are only rough. In 1919 the total stand of black cherry of saw-timber size was placed between 400 million and 500 million board feet.<sup>1</sup> The 1943 supply of merchantable old-growth timber probably was much less—possibly about 250 million board feet. The largest remaining supplies are believed to be located in the Appalachian Mountains in New York, Pennsylvania, and West Virginia.

<sup>1</sup> SPARHAWK, W. N. SUPPLIES AND PRODUCTION OF AIRCRAFT WOODS. Ann. Rpt. Natl. Advisory Comm. Aeronautics 5 (Rpt. 67) : 409-471, illus. 1919.

**Production.**—In 1907<sup>2</sup> the production of black cherry lumber was 9,087,000 board feet. It came from about 30 States.

In 1908 production rose to 18,054,000 feet, and in 1909 to 24,594,000 feet—the greatest recorded cut for any one year. After 1912 the cut decreased markedly. In 1932, a year of acute business depression, it fell to 814,000 board feet, but by 1942 the recorded production had risen to 13,816,000 board feet—the largest cut since 1913.<sup>3</sup>

The average annual reported production of black cherry lumber for the 10-year period 1933–42 was approximately 6 million board feet.<sup>4</sup> West Virginia, Pennsylvania, and New York have been the leading producing States since 1907. West Virginia held first place until 1921 when Pennsylvania took the lead and has generally held it in subsequent years.<sup>5</sup>

In addition to being cut for lumber, comparatively small quantities of black cherry are cut for veneer, posts, fuel wood, railway ties, etc. The average annual cut of black cherry for all purposes in recent years is estimated roughly at 7 million feet.

**Properties.**—The heartwood of black cherry varies in color from light to dark reddish brown and has a beautiful and distinctive luster. The sapwood is narrow and nearly white. The annual rings are fairly distinct on a cross-section, but not as prominent as the radial pith rays which show as numerous and distinct lines at right angles to the annual rings.

The wood has a fairly uniform texture and, while not as easy to work with tools as softer woods, has very satisfactory machining properties. It shows very little figure, but can be readily finished so as to preserve its natural silky sheen. Black cherry is moderately heavy,<sup>6</sup> strong, stiff, moderately hard, has high shock-resisting ability and moderately large shrinkage. It stays in place well after seasoning and has the reputation of being comparatively free from checking or warping. It can be finished to resemble mahogany closely.

Information on the durability of black cherry under conditions favorable to decay is not available. The wood, however, is seldom used under such conditions. In gluing properties it is classed with woods that glue satisfactorily with different glues provided moderate care is used in the operation.

**Principal uses.**—Practically all of the black cherry that is cut is sawed into lumber; the lumber is then manufactured into various products, principally furniture and backing blocks on which electrotype plates, used in printing, are mounted. Other less important uses include burial caskets, woodenware and novelties, patterns and flasks, plumbers' woodwork, and finish in buildings and railway coaches. Some black cherry is used for veneer, posts, and fuel wood, and a small amount is cut for railroad ties. Occasional use has been made of the wood for gunstocks, and it has proved satisfactory for this purpose but is not considered the equal of black walnut, the

<sup>2</sup> The earliest year for which production statistics (Bureau of the Census) on black cherry lumber are available.

<sup>3</sup> No records are available to show the number of States which furnished the 1942 cut. In 1940 black cherry was reported from 14 States.

<sup>4</sup> It is quite probable that this figure is smaller than it should be since there is difficulty in obtaining a complete and accurate record of lumber production of species cut in comparatively small quantities by small, widely scattered mills.

<sup>5</sup> Except in 1924 when Ohio was first; in 1928 and 1939, when West Virginia was first; and in 1931 when New York was first. Information on the cut of black cherry by States is not available for 1938, 1940, 1941, and 1942.

<sup>6</sup> The average weight of black cherry in an air-dry condition (12 percent moisture) is 35 pounds per cubic foot.



standard gunstock material. The bark contains hydrocyanic acid, and some use of it is made in medicine.

Table 1 gives the amounts of black cherry used in the manufacture of wooden products in 1912, 1928, 1933, and 1940. Included is black cherry in the form of lumber, and much smaller amounts of logs and bolts, and veneer.

TABLE 1.—Black cherry used in the manufacture of wooden products

[Thousands of board feet]

Product	1912	1928	1933	1940
Agricultural implements.....	1			
Boot and shoe findings.....	25			51
Boxes, baskets and crating.....	170	158	109	181
Car construction and repair.....	1,965	620	187	181
Caskets and burial boxes.....	33	12	40	376
Dowels and skewers.....	10			
Electrical equipment.....	28	1		
Fixtures.....	2,232	209	37	78
Flooring.....	(2)	(2)		21
Furniture.....	678	1,680	590	3,996
Handles.....	1,106	164	193	234
Instruments, musical.....	334	122	16	19
Instruments, professional and scientific.....	733	299	37	317
Laundry appliances.....	2	200		
Machinery.....	68			5
Patterns and flasks.....	166	60	321	320
Playground equipment.....	15			
Plumbers woodwork.....	92	5		300
Printing material.....	2,090	2,909	1,096	2,779
Refrigerators.....	7			145
Rollers, shade and map.....	2			
Sash, doors, general millwork.....	1,684	523	60	172
Ship and boat building.....	185		1	15
Shuttles, spools, bobbins, looms.....	5	(3)	(3)	1
Sporting and athletic goods.....	1			16
Surgical supplies.....	10			
Tanks.....	1			
Toys.....	2	50	44	170
Vehicles, motor.....	(4)			
Vehicles, nonmotor.....	40			
Woodenware and novelties.....	362	231	29	356
Total.....	12,047	7,255	2,760	69,733

<sup>1</sup> Does not include skewers.

<sup>2</sup> Included in "Sash, doors, general millwork."

<sup>3</sup> Does not include looms.

<sup>4</sup> Included in "Vehicles, nonmotor."

<sup>5</sup> This total includes 9,342,000 board feet of lumber, 240,000 board feet of logs, and 151,000 board feet of veneer.

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